



Vigilant

The Journal of the 143rd



143rd Composite Squadron, Waterbury, CT

FEB 2012

Squadron Schedule

- 03MAR12 CTWG Cadet Competition**
New Fairfield, CT
Uniform: Blues/Polo
- 06MAR12 Squadron Meeting**
ES/Safety/Character Dev.
Uniform: BDU/Polo
- 10MAR12 Squadron Leadership School**
CTWG HQ
Uniform: Blues/Polo
- 13MAR12 Squadron Meeting**
AE
Uniform: BDU/Polo
- 16MAR12 Cadet Great Start Weekend**
Camp Niantic
Uniform: BDU/Polo
- 17MAR12 Training Leaders of Cadets Course**
Camp Niantic
Uniform: BDU/Polo
- 20MAR12 Squadron Meeting**
CPFT/Fitness Activity
Uniform: PT/BDU/Polo
- 27MAR12 Squadron Meeting**
Leadership
Uniform: Blues/Corporate
- 03APR12 Squadron Meeting**
ES/Safety/Character Dev.
Uniform: BDU/Polo
- 10APR12 Squadron Meeting**
AE
Uniform: BDU/Polo
- 17APR12 Squadron Meeting**
CPFT/Fitness Activity
Uniform: PT/BDU/Polo
- 24APR12 Squadron Meeting**
Leadership
Uniform: Blues/Corporate
- 01MAY12 Squadron Meeting**
ES/Safety/Character Dev.
Uniform: BDU/Polo
- 04MAY12 NYWG Conference**
Lake George, NY

USAF Medics Teach First Aid Class

Twelve cadets and two senior members from the 143rd traveled to Westover Air Reserve Base in Chickopee, MA to receive basic first aid training from the medics at the 439th Aeromedical Staging Squadron.



SrA Jason Snukis reviews the procedure to administer an epinephrine pen with C/SMSgt Grosos as he practices on C/SMSgt Major.

The training was led by Maj Kathleen Veaudry, who is certified by the American Heart Association to teach



Maj Kathleen Veaudry demonstrates how to properly put on and remove sterile gloves.

Basic First Aid. Training included treating injuries and sickness as well as safety procedures for the responder. Assisting Major Veaudry were TSgt Kara Vautour, SrA Stephanie Silva and SrA Jason Snukis.

This training meets the First Aid requirement for the cadets to earn a Ground Team Member rating in CAP's Emergency Services qualification system.



TSgt Kara Vautour evaluates C/Maj Palys as she practices administering an epinephrine pen to C/CMSgt Foster.



Maj Kathleen Veaudry demonstrates how to properly wrap a wound with help from SrA Stephanie Silva.



C/Capt Mullai practices using direct pressure on C/SSgt Moore as C/A1C Moran looks on.

The 143rd Composite Squadron

Squadron Commander: Maj Timothy McCandless
Deputy Commander for Seniors: Lt Col Richard Levitt
Deputy Commander for Cadets: Maj Joseph Palys
Cadet Commander: C/Capt Eric Testman
Cadet First Sergeant: C/CMSgt Cameron Foster

Regular Meetings every Tuesday 7-9pm
Connecticut National Guard Armory
64 Field Street, Waterbury, Connecticut

www.gocivilairpatrol.com

CTWG TrainEx

143rd Members Participate in
CTWG Training Exercise



Maj Kieth Neilson (r.) trains Maj Tom Litwinczyk (l.) in Operations Section Chief tasks while the mission Ground Branch Director, Capt Tim Ceritello, looks on.

Connecticut Wing conducted an Emergency Services training exercise on 18FEB12 that included simulated Search and Rescue and Damage As-

essment missions. Lt Col Levitt and Maj Palys from the 143rd joined CAP personnel from around the wing to create a training experience that accurately simulated real world mission taskings.

Mission Base was located at the Thames River Composite Squadron headquarters at the Groton Airport (GON). Members at mission base trained in Incident Command System tasks while aircrews were deployed on Search and Rescue and Aerial Photography sorties. Ground teams were dispatched and coordinated with aircrews to locate distress beacons.



Lt Col Tony Vallillo updates the flight status board. Status boards were located around the mission base and showed everything from weather to air and ground team locations.



Thames River Composite Squadron ground team was deployed to locate a simulated distress beacon.



Aerial photo of the Goodspeed Bridge with the Goodspeed Opera House at the far end. Air crews were tasked with taking photos of bridges along the Connecticut River.

1st Air Force Commander Visits CAP Headquarters



Lt. Gen. Sid Clarke, 1st Air Force commander, points out a feature on a Civil Air Patrol Cessna 182's Garmin 1000 glass cockpit navigation map during a CAP flight. Clarke visited CAP's National Headquarters at Maxwell Air Force Base, Ala., Jan. 30. (Civil Air Patrol photo by Susan Schneider)

2/7/2012 - MAXWELL AIR FORCE BASE, Ala. -- U.S. Air Force Lt. Gen. Sid Clarke paid his first visit last week to Civil Air Patrol National Headquarters since being named commander of Continental U.S. North American Aerospace Defense Command Region - 1st Air Force (Air Forces Northern), a position that includes a seat on CAP's Board of Governors.

Clarke, the first lieutenant general to command 1st Air Force, assumed command Aug. 31 at Tyndall Air Force Base, Fla. First Air Force is made up of four

direct reporting units, 10 aligned Air National Guard units and a large number of active aerospace control alert sites - including aircraft, air defense artillery and up to 15,000 active duty, National Guard, Air Force Reserve and civilian personnel.

During his visit Jan. 30 to National Headquarters, Clarke received a briefing on CAP's three congressionally mandated missions - emergency services, cadet programs and aerospace education - and on the organization's support for 1st Air Force, which includes flying 60 percent to 80 percent of 1st Air Force's daily missions. During fiscal year 2011, CAP flew more than 75,000 hours on Air Force assigned missions which includes those tasked by 1st Air Force.



Don Rowland, Civil Air Patrol executive director, presents his challenge coin to Lt. Gen. Sid Clarke, 1st Air Force commander, after a briefing on the organization's missions and its relationship with 1st Air Force. Clarke visited CAP's National Headquarters at Maxwell Air Force Base, Ala., Jan. 30. (Civil Air Patrol photo by Susan Schneider)

Clarke told his CAP hosts that 1st Air Force values CAP as a partner not only for the critical role it plays as a force multiplier for the Air Force, but also for the speed with which the organization and its members are able to respond to taskings.

The general also toured CAP's National Operations



Lt. Gen. Sid Clarke, 1st Air Force commander, views squadron patches in a historic display in the Civil Air Patrol National Headquarters' lobby. Clarke visited CAP's National Headquarters at Maxwell Air Force Base, Ala., Jan. 30. (Civil Air Patrol photo by Susan Schneider)

Center and received a flight in one of the organization's Cessna 182 airplanes equipped with Garmin 1000 glass cockpit technology, which features flight instrumentation, location, navigation, communication and identification data on a high-resolution display. Flying with Lt. Col. Chad Grondahl, director of operations for the Alabama Wing, Clarke was able to survey tornado damage that occurred during the past year.

As the joint force air component commander for the North American Aerospace Defense Command, NORAD, and the U.S. Northern Command, USNORTHCOM, Clarke is directly responsible for developing contingency plans and conducting full-spectrum Air Force air and space operations in the continental U.S., Puerto Rico and the U.S. Virgin Islands, as well as over maritime approaches to the U.S. The organization is also responsible for providing defense support of civil authorities as the air component to USNORTHCOM. In addition, the 601st Air & Space Operations Center - which plans, directs and assesses air and space operations for NORAD and USNORTHCOM - falls under his direction.



Civil Air Patrol Lt. Col. Chad Grondahl, director of operations for the Alabama Wing, conducts a safety briefing with Lt. Gen. Sid Clarke, 1st Air Force commander, before their flight during Clarke's visit to CAP's National Headquarters at Maxwell Air Force Base, Ala., Jan. 30. (Civil Air Patrol photo by Susan Schneider)

Cadet Orientation Flights

Cadets from the 143rd completed Orientation Flights in February at the Waterbury-Oxford Airport (OXC). Pilot Capt Dan Hanle flew six flights that included lessons on ground handling, preflight, take-off & landing, normal flight maneuvers, advanced flight maneuvers and use of instruments in flight.



C/AIC Christian Tynan completed an orientation flight lesson on Advanced Flight Maneuvers.



C/AIC Christian Tynan, C/SSgt Matthew McCarthy-Calabrese and Cadet Connor Buzak (l. to r.) prior to their flights.



CAP Aircraft N9344L, known as "Four Four Lima", is a Cessna 172 with a very special history. This is the first aircraft to fly over Ground Zero in New York City after the 9/11 terrorist attack. The aircraft was assigned to NYWG in 2001, but was later transferred to CTWG. In honor of that special flight over Ground Zero, the paint scheme of the aircraft was not updated to the current CAP red, white and blue paint scheme.



Cadet Orientation Pilot Capt Dan Hanle explains runway operations during a preflight inspection.



Cadet Connor Buzak completed his first orientation flight lesson on Ground Handling, Preflight, Take-Off & Landing.



C/TSgt Alan Hinkson, C/Capt Midhat Mullai and C/MSgt Alec Beliveau (l. to r.) prior to their flights.



C/MSgt Alec Beliveau completed an orientation flight lesson on Normal Flight Maneuvers.

February Promotions

The following members of the 143rd Composite Squadron were promoted in February:



Lynnise Stephen has completed the Dr Robert H Goddard Achievement and has been promoted to C/CMSgt.



Alan Hinkson has completed the Capt Eddie Rickenbacker Achievement and has been promoted to C/TSgt.



Aidan Moran has completed the Mary Feik Achievement and has been promoted to C/SrA.



Connor Buzak has completed the Gen J F Curry Achievement and has been promoted to C/Amn.



Sawyer Collins has completed the Gen J F Curry Achievement and has been promoted to C/Amn.



Cadet Connor Buzak is promoted to C/Amn by Maj McCandless and C/Capt testman.



Cadet Lynnise Stephen is promoted to C/CMSgt by Maj McCandless and C/Capt Testman.



Cadet Alec Beliveau is promoted to C/MSgt by his father, 2nd Lt Beliveau and Maj McCandless. Cadet Beliveau earned his promotion in January.



Cadet Aidan Moran is promoted to C/SrA by Maj McCandless and C/Capt Testman.



143rd Earns Quality Cadet Unit Award

Any cadet unit that displays strong program fundamentals can earn the Quality Cadet Unit Award. This new award motivates squadrons to pursue goals that we think will inevitably lead to their having a vibrant Cadet Program. The Quality Cadet Unit Award is purely objective. Cadet and composite squadrons who meet the challenging criteria below automatically earn the award.

ELIGIBILITY

All cadet and composite squadrons with a minimum of 10 cadets are eligible.

2011 CRITERIA

The award criteria are entirely objective. Any squadron that meets at least 5 of the 9 criteria listed below, as of 31 December of the preceding year, qualifies:

Adult Leadership: Unit has at least 2 Training Leaders of Cadets graduates on its roster.



Aerospace: Unit earned the Aerospace Excellence Award (AEX) during previous year

Cadet Achievement: 30% of cadets on roster have attained the Wright Brothers Award.

Encampment: 50% of cadets on roster have completed encampment

Enrollment: Unit has at least 35 cadets listed on its roster

Growth: Unit's cadet roster increased by 10%, or 10 cadets during previous year

Orientation Flights: 60% of cadets on roster have participated in at least 1 flight

Retention: Unit retained 40% of first year cadets during previous year.

The 143rd met six out of eight criteria for this award. The squadron was the only unit in Connecticut to complete the Aerospace Education eXcellence (AEX) program in 2011. The squadron also led the wing in the Encampment, Cadet Achievement and Retention categories. The 143rd was second in the wing in the Orientation Flights category, which is a great accomplishment considering the unit is not based at an airport.

Four other Connecticut Wing Squadrons; The Silver City Composite Squadron, The Stratford Eagles Composite Squadron, The 186th Composite Squadron and The 801st Cadet Squadron were also presented this award.

For 2012 the criteria for the Quality Cadet Unit Award will include a Drug Demand Reduction item and the Adult Leadership and Cadet Achievement criteria will require higher numbers to attain.

The Neil Armstrong Award



CAP Cadet Achievement 8 is named after Astronaut Neil Armstrong.

On 16 March 1966, Armstrong flew his first space mission as command pilot of Gemini VIII with David Scott. During that mission Armstrong piloted the Gemini VIII spacecraft to a successful docking with an Agena target spacecraft already in orbit. While the docking went smoothly and the two craft orbited together, they began to pitch and roll wildly. Armstrong was able to undock the Gemini and used the retro rockets to regain control of his craft, but the astronauts had to make an emergency landing in the Pacific Ocean.

As spacecraft commander for Apollo 11, the first piloted lunar landing mission, Armstrong gained the distinction of being the first person to step on the surface of the Moon. On 16 July 1969, Armstrong, Michael Collins, and Edwin E. "Buzz" Aldrin began their trip to the Moon. Collins was the Command Module pilot and navigator for the mission. Aldrin, a systems expert, was the Lunar Module pilot and became the second person to walk on the Moon. As commander of Apollo 11, Armstrong piloted the Lunar Module to a safe landing on the Moon's

surface. On 20 July 1969, at 10:56 p.m. EDT, Neil Armstrong stepped down onto the Moon and made his famous statement, "That's one small step for a man, one giant leap for mankind." Armstrong and Aldrin spent about two and one-half hours walking on the Moon collecting samples, doing experiments, and taking photographs. On 24 July 1969, the three men splashed down in the Pacific Ocean. They were picked up by the aircraft carrier, U.S.S. Hornet.

The Armstrong Achievement requires cadets to write a 300-500 word essay and present a 5 to 7 minute speech to the unit on one of the following topics:

- Explain why America's aerospace power is vital to commerce, science or national security.
- Describe leadership mistakes you have made and explain what you learned from them.
- Explain the difference between followership and leadership.



Neil Armstrong took this photo of Edwin "Buzz" Aldrin while on the moon. Photo and biography taken from history.nasa.gov

Cadets Present Armstrong Award Speeches

C/CMSgt Cameron Foster and C/CMSgt Drew Grosf both presented their Armstrong Award speeches to the squadron this month.

Cadets are judged on their performance through a point system that takes into account style, content, presentation and audience engagement. Maj McCandless, Squadron Commander, and Maj Palys, Deputy Commander for Cadets, judged the speeches and written essays submitted and determined both cadets exceeded the requirements and successfully completed their assignments.



Cadet Cameron Foster presents his Armstrong Award speech to the squadron.



Cadet Drew Grosf presents his Armstrong Award speech to the squadron.

Operation: Windchill

Multi-Squadron Training Exercise

On 25FEB12 members of the 143rd joined members of the 103rd Composite Squadron to conduct an Emergency Services Training Mission. Mission base was located at the 103rd Airlift Wing Headquarters on the CT Air Guard Base in Windsor Locks, CT.



Maj Jack Shapiro (r.), CTWG Emergency Services Training Officer, reviews mission base tasks with Lt Col Levitt (l.) and Maj Palys (c.).

The mission included two ground teams who were sent to Peoples State Forest in Barkhamsted, CT. The teams were told an Emergency Locator Transmitter (ELT) signal was detected in the area and they were to find it.



Maj McCandless (r.) reviews land navigation techniques with C/Capt Mullai (l.) and C/Maj McCandless (c.).

The teams triangulated the signal and found the transmitter without any difficulty. They then conducted Ground Team Member training per CAP's Ground & Urban Direction Finding Team Task Guide. The teams spent the morning in the field and then returned to mission base for a delicious MRE lunch.

Mission Base staff worked in various Incident Command System positions to direct and support the ground teams. Evaluators for this mission were Maj Jack Shapiro, CTWG Emergency Services Training Officer and Lt Col Lester Dutka from the Westover Composite Squadron.



Cadet Ground Team members track an ELT signal.



Maj Litwinczyk reviews Mission Staff Assistant tasks with C/Maj Palys.

The concept of ICS was developed more than thirty years ago, in the aftermath of a devastating wildfire in California. During 13 days in 1970, 16 lives were lost, 700 structures were destroyed and over one-half million acres burned. The overall cost and loss associated with these fires totaled \$18 million per day. Although all of the responding agencies cooperated to the best of their ability, numerous problems with communication and coordination hampered their effectiveness. As



C/MSgt Beliveau (l.) and C/SrA Aponte (r.) track an Emergency Locator Transmitter (ELT) signal.

a result, the Congress mandated that the U.S. Forest Service design a system that would "make a quantum jump in the capabilities of Southern California wildland fire protection agencies to effectively coordinate inter-agency action and to allocate suppression resources in dynamic, multiple-fire situations."

Throughout the transition to the National Incident Management System, it is important to remember why we have the NIMS and why ICS is a critical piece of the incident management system. Most incidents are local, but when we're faced with the



C/TSgt Moore holds the training ELT after the ground team located it.

worst-case scenario, such as Sept. 11, 2001, all responding agencies must be able to interface and work together. The NIMS, and in particular, the ICS component, allow that to happen, but only if the foundation has been laid at the local level. If local jurisdictions adopt a variation of ICS that cannot grow or is not applicable to other disciplines, the critical interface between responding agencies and jurisdictions cannot occur when the response expands.

It is important that everyone understand that with the establishment of the NIMS, there is only one ICS. As agencies adopt the principles and concepts of ICS as established in the NIMS, the incident command system can expand to meet the needs of the response, regardless of the size or number of responders. The key to both NIMS and ICS is a balance between standardization and flexibility.



C/Maj McCandless talks to the Cub Scouts about the missions of CAP.

The NIMS Integration Center (NIC) is working towards a common understanding and application of the ICS. As the office established to manage and oversee the entire NIMS, the Center will continue its collaboration with stakeholders at all levels of government and across all response disciplines. The initial staff is detailed from other parts of DHS, including FEMA, the Office for Domestic Preparedness (ODP) and the Science and Technology (S&T) Directorate.

As the NIMS Integration Center continues to grow it will evolve into robust, fully integrated center that will incorporate additional DHS employees, interagency detailees and liaisons, as well as state, tribal and local government representatives.

- NIMS/ICS History from www.fema.gov



Some of the almost 70 Cub Scouts in attendance.

In addition to participating in the Emergency Services Training, cadets had the opportunity to talk to over 70 Connecticut Cub Scouts who were having an activity at the 103rd Airlift Wing Headquarters concurrently with CAP's training.

The cadets participated in the Scout flag ceremony and C/Maj McCandless, C/Maj Palys and C/Capt Testman all addressed the scouts, covering a wide range of topics that covered all of CAP's missions. The scouts then asked questions and discussed ideas for future joint activities.

C/CMsGt Stephen named Air Force Association Squadron Outstanding Cadet for 2012



The Outstanding Squadron Cadet of the Year Award is a yearly award to recognize a top performing cadet in each CAP Squadron. This year Maj McCandless, commander of the 143rd Composite Squadron has given this award to C/CMsGt Lynnise Stephen. Cadet Stephen joined CAP in August of 2010. She is an active participant of the cadet program and currently serves as a Cadet Flight Sergeant.

AFA provides each CAP squadron or unit a unique medal, ribbon and certificate to present to the most outstanding CAP cadet in each squadron each year. AFA is proud to support these accomplished cadets with an award package that includes a silver medal accompanied by a sky-blue ribbon and a certificate.

The Air Force Association (AFA) is a non-profit, independent, professional military and aerospace education association promoting public understanding of aerospace power and the pivotal

AFA

The Air Force Association ribbon is authorized for wear on the CAP cadet uniform.

role it plays in the security of the nation. AFA publishes Air Force Magazine, conducts national symposia and disseminates information through outreach programs. It sponsors professional development seminars and recognizes excellence in the education and aerospace fields through national awards programs. AFA presents scholarships and grants to Air Force active duty, Air National Guard and Air Force Reserve members and their dependents; and awards educator grants to promote science and math education at the elementary and secondary school level. Additionally, AFA publishes a wide range of materials on www.afa.org.



C/CMsGt Lynnise Stephen receives the AFA Outstanding Cadet Award from Lt Col Tony Vallillo. Lt Col Vallillo is a retired USAF officer and AFA member. He is also a USAF Academy Liaison Officer.

Senior Member Professional Development Awards

The following members of the 143rd Composite Squadron were awarded Senior Member Professional Development Achievements in February:

Timothy McCandless has earned a Senior Rating in the Logistics Specialty Track.

Paul Beliveau has earned a Technician Rating in the Cadet Programs Specialty Track.

February Awards

The following members of the 143rd Composite Squadron were earned awards in February:

Edward Conway has been awarded the Red Service Ribbon for five years of service to CAP.

Daniel Hanle has been awarded the Red Service Ribbon for two years of service to CAP.

Dawn Levitt has been awarded the Red Service Ribbon for two years of service to CAP.

143rd Receives 2012 Aerospace Education Excellence Award

The hands-on Aerospace Education Excellence (AEX) program, which annually promotes AE to more than 60,000 CAP adults, cadets, and students across the country, is always available to CAP units and teacher members. Four AEX books, as well as Robotics, Rocketry, STK, and other AE programs can be used to earn this award.

To receive the yearly award, units must complete six lessons and go on an aerospace related field trip. Cadets participate in the program as part of the Aerospace Education program conducted at regular squadron meetings.

The cadets completed lessons that explored rocketry, flight dynamics, aircraft components and aerospace careers. Their field trip took them to La Guardia Airport in New York City to use a commercial flight simulator.

Cadets who complete the program receive a full color certificate and the squadron receives a plaque to recognize the achievement.



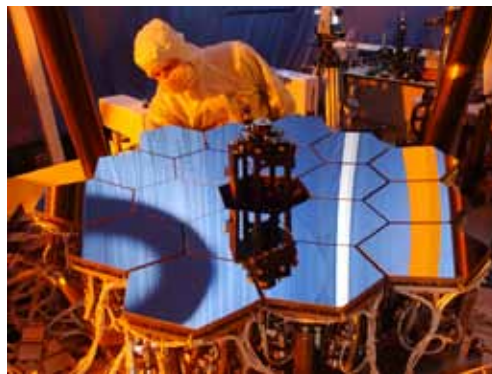
143rd Composite Squadron Aerospace Education Officer Capt Rich Hinkson (far left) with the cadets who participated in the 2012 AEX program. Capt Hinkson is pictured wearing his Continental Airlines pilot uniform. Continental Airlines made their flight simulator at La Guardia Airport available to the cadets for a day to fulfill the field trip portion of the AEX program.



The James Webb Space Telescope

The James Webb Space Telescope (sometimes called JWST) is a large, infrared-optimized space telescope. The project is working to a 2018 launch date. Webb will find the first galaxies that formed in the early Universe, connecting the Big Bang to our own Milky Way Galaxy. Webb will peer through dusty clouds to see stars forming planetary systems, connecting the Milky Way to our own Solar System. Webb's instruments will be designed to work primarily in the infrared range of the electromagnetic spectrum, with some capability in the visible range.

Webb will have a large mirror, 6.5 meters (21.3 feet) in diameter and a sunshade the size of a tennis court. Both the mirror and sunshade won't fit onto the rocket fully open, so both will fold up and open once Webb is in outer space. Webb will reside in an orbit about 1.5 million km (1 million miles) from the Earth.



Fully functional, 1/6th scale model of the JWST mirror in optics testbed. NASA Photo.

The James Webb Space Telescope was named after the NASA Administrator who crafted the Apollo program, and who was a staunch supporter of space science.

The Webb will be the premier observatory of the next decade, serving thousands of astronomers worldwide. It will study every phase in the history of our Universe, ranging from the first luminous glows after the Big Bang, to the formation of solar systems capable of supporting life on planets like Earth, to the evolution of our own Solar System.

Webb is an international collaboration between NASA, the European Space Agency (ESA), and the Canadian Space Agency (CSA). The NASA Goddard Space Flight Center is managing the development effort. The prime contractor is Northrop Grumman; the Space Telescope Science Institute will operate Webb after launch.

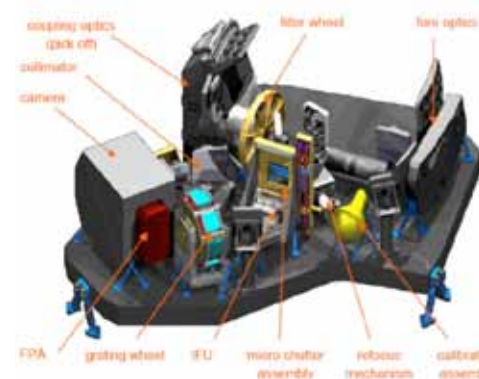
Several innovative technologies have been developed for Webb. These include a folding, segmented primary mirror, adjusted to shape after launch; ultra-lightweight beryllium optics; detectors able to record extremely weak signals, microshutters that enable programmable object selection for the spectrograph; and a cryocooler

for cooling the mid-IR detectors to 7K. The long-lead items, such as the beryllium mirror segments and science instruments, are under construction. All mission enabling technologies were demonstrated by January 2007.

There will be four science instruments on Webb: the Near InfraRed Camera (NIRCam), the Near InfraRed Spectrograph (NIRSpec), the Mid-InfraRed Instrument (MIRI), and the Fine Guidance Sensor/ Near InfraRed Imager and Slitless Spectrograph (FGS-NIRISS). Webb's instruments will be designed to work primarily in the infrared range of the electromagnetic spectrum, with some capability in the visible range. It will be sensitive to light from 0.6 to 27 micrometers in wavelength.

Webb has four main science themes: The End of the Dark Ages: First Light and Reionization, The Assembly of Galaxies, The Birth of Stars and Protoplanetary Systems, and Planetary Systems and the Origins of Life.

-Photos and story taken from www.jwst.nasa.gov



This figure shows a Computer Aided Design layout of the NIRSpec instrument. The instrument measures 190 cm (74.8 inches) across and weighs close to 200 kg (440 pounds).. NASA Photo.

DOUGLAS C-1

In 1925 the U.S. Army adopted a new designation system for cargo/transport aircraft. Between 1919 and 1924, aircraft used a T (Transport) designation and in 1925 the system was changed to C- (Cargo). The C- system is still in use today although the numbering started over in 1962 when the Army, Navy and Air Force systems were combined and simplified.

The Douglas C-1 was the first plane assigned in the new C category. The aircraft design was based on several earlier and similar designs developed by Douglas in the early 1920s (including the Douglas World Cruisers used in the



Douglas C-1 No. 79 (S/N 25-433) in flight, taken April 28, 1926. (U.S. Air Force photo)



Douglas C-1 Air Ambulance left center fuselage with modified access doors. (U.S. Air Force photo)

first round-the-world flight in 1924). The C-1 featured an enclosed passenger compartment capable of carrying six passengers or about 2,500 pounds of cargo. A trap door was placed in the lower fuselage to allow large and/or heavy cargo (particularly aircraft engines) to be lifted directly into the cargo compartment. An auxiliary door for passengers and light cargo was included on the right side of the center fuselage.

The C-1 was powered by the Liberty 12 engine and carried a crew of two in an open cockpit. Several C-1s were used in test programs -- as an engine test bed, as a prototype air ambulance and as refueling aircraft for early air-to-air refueling experiments.

After the war, the need for air ambulance aircraft was reflected in the creation of the A (Ambulance) designation. The A designation was used between 1919 and 1924 and only two aircraft types were assigned, the Cox-Klemin A-1 and Fokker A-2. After 1924, the air ambulance was relegated to a secondary role; however, many early C aircraft were equipped with fixtures to allow for quick conversion to an air ambulance when the need arose. The result had space for four litters, a flight surgeon or nurse, and a small supply cabinet. The wood floor was partially replaced with a metal floor for increased strength and durability.

-Taken from nationalmuseum.af.mil



Forward interior view of Douglas C-1 Air Ambulance. (U.S. Air Force photo)



Marijuana Invades the Brain

How do the chemicals in marijuana change the way a person sees, hears, smells, tastes, and feels things?

When someone uses marijuana, these chemicals travel through the bloodstream and quickly attach to special places on the brain's nerve cells. These places are called receptors, because they receive information from other nerve cells and from chemicals. When a receptor receives information, it causes changes in the nerve cell.



The chemical in marijuana that has a big impact on the brain is called THC -- tetrahydrocannabinol. Scientists recently discovered that some areas of the brain have a lot of THC receptors, while others have very few or none. These clues are helping researchers figure out exactly how THC works in the brain.

Marijuana may cause some parts of the body to react in different ways:

Rapid Heartbeat -- Marijuana can speed the heart rate up to 160 beats per minute.

Dilated Blood Vessels -- Dilated blood vessels make the whites of the eyes turn red.

A Feeling of Panic -- Panic feelings may be accompanied by sweating, dry mouth and trouble breathing.

Daily cough and more frequent chest colds very much like tobacco smokers.

-Taken from teens.drugabuse.gov

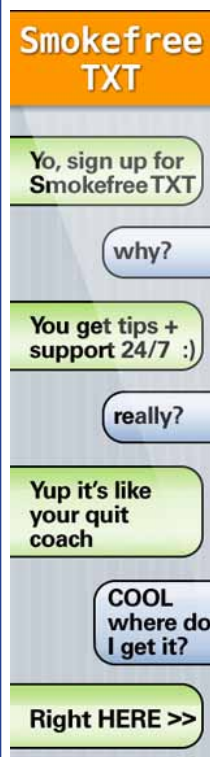
No More Smoking

A "Quit" Coach Is Just a Text Message Away

According to NIDA's 2011 Monitoring the Future survey results, teen smoking rates are currently at their lowest since the survey began in 1975. However, many teens continue to take up the habit—19 percent of 12th-graders reported past-month cigarette use.

By now, we all know that smoking has negative health effects. These include lung and heart disease and particularly cancer—since cigarettes contain chemicals that are carcinogenic, or cancer-causing. However, when it comes to quitting, the main problem is nicotine. Nicotine is addictive and makes quitting notoriously hard.

NCI Smokefree Teen Texting To help teens quit, the National Cancer Institute (NCI) recently launched SmokefreeTXT, a free text-to-quit service that sends text messages with encouragement, advice, and tips directly to teens' cell phones.



How It Works

Sign up at www.teen.smokefree.gov or text "QUIT" to "iQUIT" (47848) and provide the date you smoked last. After that, you'll receive text messages for up to 6 weeks. Research shows that support for quitting continues to be important beyond the first few weeks.

Smokefree Teen

The text-to-quit campaign is just one feature of a broader effort to encourage teens to quit smoking. NCI's new Smokefree Teen Web site features information, quizzes, comics, and other resources to help teens understand the decisions they make and to take control of their health.

Smokefree Teen also offers a free smartphone app, QuitSTART—an interactive guide that provides mood management tips, tracks cravings, and monitors quit attempts.

You can find Smokefree Teen on several social media pages to connect other teens with tools to help them quit. Think about "liking" Smokefree Teen on Facebook, even if you don't smoke, to show support for your friends or family who are trying to quit.

Is 2012 the year of texting for healthy living? Let us know if you think campaigns like these can help you stay committed to your resolutions.

-Taken from teens.drugabuse.gov

The Buzz on Caffeine

Do your parents or teachers start the day with a cup of coffee? There's no question that coffee is a popular drink—the National Coffee Association estimates that Americans drink 400 million cups of coffee a day. It's the caffeine in coffee that provides the energy boost that many people claim they need to function. Caffeine has that perk-up effect because it is a stimulant. It blocks a brain chemical, adenosine, which causes sleepiness.



Caffeine is found in tea leaves, coffee beans, cacao (used to make chocolate), and cola nuts (which come from the plant that gives soda its flavor). Caffeine is also found in many foods and drinks—non-cola sodas like root beer and orange soda, hot cocoa, and ice cream—and some medicines. The latest place to find caffeine is in energy drinks.

Caffeine's Effects—Not Totally Harmless

Caffeine is a mild stimulant and not a drug, so its use isn't regulated like prescription drug use is. Still, consuming too much caffeine can make you feel jittery or jumpy—your heart may race and your palms may sweat.

If caffeine is taken in combination with other substances, like alcohol, it can really be dangerous because mixing a stimulant and a depressant like alcohol confuses the brain. A recent report from the Substance Abuse and Mental Health Services Administration shows that emergency room visits for high doses of caffeine have increased sharply. The likely cause is caffeine-infused energy drinks mixed with alcohol. Those most affected? Young people between 18 and 25 years old.

So What's a Body To Do?

Everyone needs to perk up in the middle of a long day from time to time, but a jolt of caffeine isn't your only option. Here are a few alternatives you can try to feel energized without overdoing the caffeine:

Sleep. This may sound obvious, but getting enough sleep is important. Teens need 9 hours of sleep a night.

Eat regularly. When you don't eat, your glucose (sugar) levels drop, making you feel drained. Some people find it helpful to eat four or five smaller meals throughout the day instead of fewer big meals.

Drink enough water. Since we are more than two-thirds H₂O, our bodies need at least 64 ounces of water a day.

Take a walk. If you're feeling drained in the middle of the day, it helps to move around. Do sit-ups or jumping jacks. Go outside for a brisk walk, ride your bike.

-Taken from teens.drugabuse.gov



Having Fun and Staying Safe

Teen Safety On The Go

As a teen, your family may give you more responsibilities and the chance to spend more time with your friends. This extra time with your friends may put you in new or different social situations and places. With your parents not around as much, you are making more choices for yourself and will need to keep yourself safe. If you forget about your safety, your fun can quickly turn into danger.



How do I keep myself safe at a party?

New social settings like parties are a fun way for you to spend time with your friends. Most of the time parties are safe, but sometimes things can happen that can make a party a dangerous place to be. It's important to know what to do if a party gets out of control and how to keep yourself safe.

- Never walk away with strangers.
- Never be alone with someone who has been drinking or taking drugs.
- Don't drink alcohol or do drugs.
- Tell your parents and friends where you are going.
- Never get in a car with someone who has been drinking or doing drugs.

What if someone offers me alcohol or drugs?

You're more likely to be offered alcohol or drugs by a friend than a stranger. It's okay to say no to friends. Many people are focused on themselves, so they won't be as worried about what you're doing as you may think. Below are eight great ways to turn down an offer.

No, thanks.

I'm not into that.

Alcohol's not my thing.

I don't feel like it — do you have any soda?

I'm okay. Thanks.

You can set an example for others by staying away from drugs and alcohol. You might be worried about not being "cool" if you don't try drugs or alcohol, but you can start a different, more real kind of "cool" by being looked up to as someone who makes confident choices for you.



Don't be a target.

How can I make a safety plan for different social situations?

No matter what the situation is, you can create a plan to help keep yourself safe. Read the following list and create your safety plan right now!

- Tell your parents where you are going, who you will be with, and when you will be back. This may sound lame, but you will be safer for doing so.
- Carry money, a phone card, or a cell phone in case you need to make an emergency phone call. Don't forget to keep emergency numbers and the phone number of a taxi service in your wallet or backpack or program them into your cell phone.
- Stay in well lit public places.
- Stick with another person or a group of your friends.
- Be aware that drugs used for sexual assault often are slipped into drinks. Open your own drinks and keep your own drink with you at all times. Learn more about rape and date rape.
- Try to avoid strangers. If you talk to them, don't share information about yourself.
- Use code words on the phone that you and your family decide on ahead of time. If you are in trouble, say the code word so that your family member knows you can't talk openly and need to be picked up right away.

What do I do if I am walking in a neighborhood I don't know well?

There are certain things that you can do to keep yourself safe until you are near home.

- Walk with another person whenever possible.
- Walk on the sidewalk of main streets and stay where it is well lit.
- Don't walk with headphones so that you can hear what is going on around you.
- If you think that you are being followed, cross the street to see if the person does the same. Do not be afraid to start running if you need to — don't wait until the person is very close to you to do this. Go to the nearest store, restaurant, or police station.
- Walk quickly and confidently.
- If someone grabs your purse or bag, just let go. DO NOT struggle with them to try to get it back. If you fight, you risk getting hurt. Money and other stuff can be replaced — your safety is the most important thing. Run in the opposite direction of the person and go to the nearest police station or store to call for help.
- If you are in trouble, yell! This will bring attention from the people around you.

What do I do if I am out and someone that I don't know comes up to me?

When you were younger, your parents probably taught you never to talk to strangers. This is a good rule for children, but in your teenage years, it doesn't always seem to fit. There are lots of times when you might need to talk to someone that you don't know. Most strangers are nice people, but it is important that you do not trust everyone that you meet right away. Know the warning signs and how to protect yourself:

Be aware of anyone in a car who stops to talk to you or ask you for directions if you are walking down the street, even if you are in a familiar neighborhood. Try to keep your distance from the car and never offer to get in the car — even if the stranger is going in the same direction that you are headed, or the stranger says there is an emergency.

Be assertive. If a person that you don't know comes up to you to start a conversation, you don't have to talk to them if you don't feel comfortable. Don't be afraid to sound rude if someone keeps bothering you. Stay calm and firmly say "NO."

Be street smart. Not all dangerous strangers are rude or forceful right away when you first meet them. It is important that you are aware of strangers, both men and women, who seem nice — the ones who make conversation easily and get important information about you without you even realizing it. Remember that you do not have to share any information. If a stranger tells you where he or she lives, it doesn't mean that you have to tell him or her where you live.

Be careful who you trust. Keep your distance from a new person until you have had the chance to get to know him or her. Don't trust someone who follows you around or won't leave you alone if you ask them to. You can make up code words with your family that they will use if there is an emergency at home. This way, if a stranger comes up to you and says that there is an emergency and that you need to leave with them, you can ask for the code words that only you and your parents know. If you are worried or nervous, you can go to police officers or to security guards with nametags and badges. You will also find people who may be able to help you at information desks and customer service desks at public places like the mall; restaurant or store managers may also be able to help you.



Be prepared. Check out self-defense classes in your town. Your local police department or school might offer classes that can teach you how to protect yourself and how to handle uncomfortable situations. Thinking ahead and planning for your safety is a way to feel powerful and confident!

You do not have to be afraid every time you leave the house. But, it is important that you take some responsibility for your own safety. Trust your instincts, pay attention to what is going on around you, and protect yourself. Remember, being safe will not take away from your fun. Being safe will make sure that you can keep having it!

-Taken from girlshealth.gov